			►1/EP2004/052369
a. CLASSIFICATION OF SUBJECT MATTER IPC 7 H04L12/28 H04Q7/38			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols) IPC 7 H04Q H04L			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
Electronic data base consulted during the International search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ, INSPEC			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category °	Citation of document, with indication, where appropriate, of the rele	evant passages	Relevant to claim No.
A	AUST S ET AL: "Design issues of handoffs between general packet r service GPRS) networks and wirele (WLAN) systems" IEEE PUBLICATIONS, vol. 2, 27 October 2002 (2002-10-pages 868-872, XP010619215 cited in the application page 868, left-hand column, line 15 page 868, right-hand column, line line 25 page 870, left-hand column, line right-hand column, line 13	adio ess LAN -27), 1 - line e 12 - 6 -	3-5
Further documents are listed in the continuation of box C. Patent family members are listed in annex.			
T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *E* earlier document but published on or after the international filing date *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to			
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the International filing date but later than the priority date claimed "P" document member of the same patent family			ular relevance; the claimed invention ared to involve an inventive step when the olined with one or more other such docu- olination being obvious to a person skilled
Date of the actual completion of the international search		Date of mailing of the international search report	

12/01/2005

Heinrich, D

Authorized officer

European Patent Office, P.B. 5818 Patentlaan 2
NL – 2280 HV Rijswijk
Tel. (+31–70) 340–2040, Tx. 31 651 epo nl,
Fax: (+31–70) 340–3016

Form PCT/ISA/210 (second sheet) (January 2004)

Name and malling address of the ISA

6 January 2005

Serial No.:

24. (new) A subscriber terminal communicating with first and second network access devices, comprising:

means for receiving signals of a connection transmitted on a physical layer from the first network access device;

means for determining at least one quality parameter based on received signals; and means for controlling relaying of an advertisement, received from the first network access device, to a mobility-controlling mechanism of a network layer, according to the at least one quality parameter, with the mobility-controlling mechanism being designed to control a handover of a link to the second network access device according to received advertisements.

15 Waller 2017 20 MAR 2006

Claims

1. Method for controlling a handover between two network devices,

with the handover being carried out as a function of at least one quality parameter determined in a link layer on the basis of signal transmissions on a physical layer, with mobility-controlling mechanism (MIP) of a network layer being used to decide on the transfer,

characterized in that

in preparation for the handover at least one message received by a currently supplying network access device is relayed from the physical layer to the network layer or suppressed as a function of at least one determined quality parameter.

- Method for handover between two network devices, with the handover being carried out as a function of at least one quality parameter determined in a link layer on the basis of signal transmissions on a physical layer, with a mobility-controlling mechanism (MIP) of a network layer being used to decide on the handover, characterized in that in preparation for the handover the insertion of an advertisement in the reception signals relayed to the network layer is carried out according to at least one determined quality parameter.
- 3. Method in accordance with claim 1 or 2,

with a decision being made regarding the relaying or insertion of at least one advertisement in an intermediate layer (POLIMAND) arranged between the link layer and the mobility-controlling network layer.

- 4. Method in accordance with the preceding claim, with the decision being made according to a comparison of at least one determined quality parameter with a least one specified threshold value.
- 5. Method in accordance with the preceding claim with at least one threshold value being defined specific to a network access device.
- 6. Method in accordance with a preceding claim, with a handover being carried out between two network devices supporting two different standards (WLAN, GPRS) on the physical layer.
- 7. Method in accordance with a preceding claim, with the handover not being carried out until a specified time interval has elapsed after completion of a preceding handover.
- 8. Method in accordance with a preceding claim with the handover not being carried out until after a determined number of received advertisements has been exceeded.

17

9. Subscriber terminal (mobile node), having means for receiving signals of a connection transmitted on a physical layer from a first network access device, means for determining at least one quality parameter on the basis of received signals, and means for controlling a relaying of an advertisement, received from the first network access device, to a mobility-controlling mechanism (MIP) of a network layer, according to at least one determined quality parameter, with the mobility-controlling mechanism (MIP) being designed to control a handover of a link to a second network access device according to received advertisements.